

STAP guidelines for screening GEF projects

Part I: Project Information	Response
GEF ID	10784
Project Title	Enhancing the sustainable management of Senegalo-Mauritanian Aquifer System to ensure access to water for populations facing climate change (SMAS)
Date of Screening	2 November 2021
STAP member screener	Blake Ratner
STAP secretariat screener	Virginia Gorsevski
STAP Overall Assessment and Rating	<p>Minor.</p> <p>The PIF provides a detailed description of preparatory steps taken to provide a foundation for integrated management of the transboundary aquifer system. The PIF refers to hydro-diplomacy and potential contributions to regional stability, but these aspects need further development.</p> <p>Impacts of climate change and objectives of adaptation and resilience are mentioned throughout; however, data is lacking to show specifically how the project area will be impacted and how measure supported through this project will effectively assist people in adapting to future impacts of climate change.</p> <p>Missing from the Theory of Change are the underlying assumptions and causal pathways including the mechanisms that will lead to these impacts. For example, pilot projects are supposed to be scaled up but there is little information to understand what these might address and how scaling will occur. A major problem seems to be extraction of water by private companies and yet this is mentioned only tangentially.</p> <p>Sections on innovation, stakeholder engagement and gender are quite preliminary and need further development.</p>

Part I: Project Information B. Indicative Project Description Summary	What STAP looks for	Response
Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	<p>The project objective is to “Foster multi-country cooperation and institutional capacity for the protection and sustainable management of the transboundary Senegalo-Mauritanian aquifer system and its dependent ecosystems in order to improve water and food security, and resilience to climate change.”</p> <p>As with many such projects, the overall approach is to foster cooperation via the TDA/SAP in the expectation that this will lead to improved environmental and socio-economic outcomes. Perhaps if the objective were reversed to begin with “improve water and food security...” this might put greater emphasis on tangible results, with the increase in cooperation as the mechanism.</p>
Project components	A brief description of the planned activities. Do these support the project’s objectives?	The planned activities are fairly standard in terms of the TDA/SAP process, several (undefined) pilot projects and knowledge management (platform, trainings, etc.). Combined, they meet the objective of fostering multi-country cooperation and capacity. Less certain is whether these components will result in improved water and food security and resilience to climate change as the mechanisms to make this happen are vague.
Outcomes	<p>A description of the expected short-term and medium-term effects of an intervention.</p> <p>Do the planned outcomes encompass important adaptation benefits?</p>	Impacts of climate change and adaptation and resilience are mentioned throughout the project; however, data is lacking to show specifically how the project area will be impacted and how measure supported through this project will effectively assist people in adapting to future impacts of climate change. For example, “adaptation actions” will take place as part of the pilot projects but these are as of yet undefined so it’s not clear what those

		actions will be and how they will provide adaptation benefits.
	Are the global environmental benefits/adaptation benefits likely to be generated?	Information provided makes this difficult to assess.
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	Yes, structure is clear.
Part II: Project justification	A simple narrative explaining the project's logic, i.e. a theory of change.	
1. Project description. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	Yes, adequate.
	Are the barriers and threats well described, and substantiated by data and references?	Yes, with reference to recent studies.
	For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?	N/A
2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	Detailed summary of related project investments.
	Does it provide a feasible basis for quantifying the project's benefits?	Data is a key barrier, so developing a robust baseline will be critical early in implementation.
	Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	
	For multiple focal area projects:	
	are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;	N/A

	are the lessons learned from similar or related past GEF and non-GEF interventions described; and	N/A
	how did these lessons inform the design of this project?	N/A
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	<p>A theory of change is presented in a diagram that lays out the problems/outputs/outcomes/longer term outcomes and impacts.</p> <p>This TOC posits that the main barriers that are preventing the sustainable management of the shared aquifer are mainly lack of knowledge, capacity, a long term strategy and engagement of stakeholders and that through a series of activities related to the TDA/SAP process, management will be improved, poverty will be reduced and adaptation to climate change and resilience will be strengthened.</p> <p>What is missing from the TOC are the underlying assumptions and causal pathways including the mechanisms that will lead to these impacts. STAP recommends strengthening these aspects prior to CEO endorsement.</p>
	What is the sequence of events (required or expected) that will lead to the desired outcomes?	Theory of change lists SAP validated as a “long term” outcome, following from the “enhanced integrated and concerted management...” This appears reversed.
	What is the set of linked activities, outputs, and outcomes to address the project’s objectives?	
	Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	Not well developed.
	Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?	Not clear.
5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund,	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?	Remains difficult to assess.

LDCF, SCCF, and co-financing		
	LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?	N/A
6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits/adaptation benefits, and are they measurable?	In the case of this shared aquifer, the benefits that would accrue from improved management and a reduction in the loss of water and an improvement in quality are regional. Changes in water quality and quantity can be measured and presumably this baseline information will be gathered as part of Component 1.
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	Plausible but greater specificity will come from TDA.
	Are the global environmental benefits/adaptation benefits explicitly defined?	Yes, but extent of anticipated governance improvement is not sufficiently defined.
	Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation?	
	What activities will be implemented to increase the project's resilience to climate change?	Adaptation benefits are vague, as there is not good information provided on the impacts of climate change on the project area and people and how change would be measured. Given the risks, these aspects should be strengthened. See, for example, recent analysis of rainfall variability and flooding events, some with catastrophic effects (Elagib, 2021) ¹ as well as regional analysis of water conflict risk related to climate change, building upon Niasse (2005). ²
7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	The PIF refers to hydro-diplomacy and potential contributions to regional stability, but these aspects need further development. The recently concluded Declaration (September 2021) endorsing regional

¹ https://www.sciencedirect.com/science/article/pii/S0022169421004091?dgcid=rss_sd_all

² https://www.researchgate.net/profile/Madiodio-Niasse-3/publication/237699436_Climate-Induced-Water-Conflict-Risks-in-West-Africa-Recognizing-and-Coping-with-Increasing-Climate-Impacts-on-Shared-Watercourses/links/5440fe550cf2a76a3cc60e7c/Climate-Induced-Water-Conflict-Risks-in-West-Africa-Recognizing-and-Coping-with-Increasing-Climate-Impacts-on-Shared-Watercourses.pdf

Induced_Water_Conflict_Risks_in_West_Africa_Recognizing_and_Coping_with_Increasing_Climate_Impacts_on_Shared_Watercourses/links/5440fe550cf2a76a3cc60e7c/Climate-Induced-Water-Conflict-Risks-in-West-Africa-Recognizing-and-Coping-with-Increasing-Climate-Impacts-on-Shared-Watercourses.pdf

		cooperation for the shared aquifer indicates promise.
	Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	The assumption is that pilot projects will be innovative and designed with replicability and scaling in mind. However, without information about the pilot projects, this is difficult to assess.
	Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	Difficult to assess on the basis of information provided.
1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.		A map of the project area is included.
2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.	Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	The section of the PIF on stakeholders outlines a comprehensive history of engagement in this area. It is clear that this project will rely mainly on national governments and regional institutions to develop the TDA and the SAP. Less clear is the following section on “other stakeholders” which provides vague information on engagement civic society, NGOs, indigenous communities, etc. However, if the pilot projects are to be successful it is likely that local communities and other non-government actors will need to be engaged through well-articulated objectives and incentives. Similarly in the stakeholders table, stakeholders for each country are not specified (e.g. local NGO, local farmers), nor are the roles well differentiated.
	What are the stakeholders’ roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	Needs development.

<p>3. Gender Equality and Women’s Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project’s results framework or logical framework include gender-sensitive indicators? yes/no/tbd</p>	<p>Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?</p>	<p>Information provided is quite generic.</p>
	<p>Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?</p>	<p>Not specified.</p>
<p>5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible,</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project’s control? Are there social and environmental risks which could affect the project? For climate risk, and climate resilience measures:</p> <ul style="list-style-type: none"> • How will the project’s objectives or outputs be affected by climate risks over the period 2020 to 	<p>The description of risks, while brief, appears to provide good coverage of a variety of environmental and institutional factors. Climate risk is addressed in a separate ESS; however, these sections refer back to the project objectives in the PIF which claim that resilience</p>

<p>propose measures that address these risks to be further developed during the project design</p>	<p>2050, and have the impact of these risks been addressed adequately?</p> <ul style="list-style-type: none"> • Has the sensitivity to climate change, and its impacts, been assessed? • Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? • What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? 	<p>will be strengthened as a result. The project would be greatly enhanced if a comprehensive climate risk assessment were to be carried out for the project area during PPG phase to clarify many of the general statements in the PIF regarding enhancing resilience, etc.</p>
<p>6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives</p>	<p>Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?</p>	<p>This project refers to the many prior and ongoing activities related to transboundary water management of this aquifer.</p> <p>Lacking, however, are specific results from these projects or lessons learned that could feed into this proposed effort and indicate how it will build on prior efforts or how these lessons informed the development of the TOC.</p> <p>It was a mentioned that during the development of the newly signed SNAB joint agreement the Regional Working Group was supported by the development of technical and institutional studies, one of which was a review of existing models of transboundary groundwater cooperation. Such a document could have good insight on the lessons learned.</p> <p>It would also be helpful to include more analysis of the successes, failures and lessons learned from prior efforts at water governance in the region. See, for example, analysis of management agreements for the Senegal River (Kliot et al., 2001³, Alam et al., 2011⁴, etc.), which may offer lessons relevant to managing subterranean water as well. Also see comparative analysis of</p>

³ <https://www.sciencedirect.com/science/article/abs/pii/S1366701701000083>

⁴ <https://iwaponline.com/wp/article-abstract/13/3/425/31611/Hydrology-vs-sovereignty-managing-the-hydrological>

		transboundary agreements in water-stressed basins citing experience in the region (e.g., Medinilla & Sergejeff, 2021). ⁵
	Is there adequate recognition of previous projects and the learning derived from them?	No
	Have specific lessons learned from previous projects been cited?	Not directly
	How have these lessons informed the project's formulation?	Difficult to assess.
	Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?	There are several committees and groups that could serve this purpose. For example, the Regional Project Management Unit (PMU), which will support the implementation and overall coordination of the project activities. There is also a science committee that could support this work.
8. Knowledge management. Outline the “Knowledge Management Approach” for the project, and how it will contribute to the project's overall impact, including plans to learn from relevant projects, initiatives and evaluations.	What overall approach will be taken, and what knowledge management indicators and metrics will be used?	<p>Knowledge capture and management is an important part of all aspects of this project, including the dedicated component as well as the strategy. The standard KM outputs are described (platform, link to IW:LEARN, trainings, dissemination of results, etc.) and KM-type activities feature prominently in the TOC.</p> <p>However, there doesn't appear to be a strategy for bringing all of these activities together in a way that will lead to tangible results and support the long-term outcomes and impacts (improved water management, reduced poverty, etc.). This merits attention in next stages of project development.</p>
	What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?	

⁵ <https://ecdpm.org/wp-content/uploads/EUs-support-to-transboundary-water-cooperation-ECDPM-Discussion-Paper-309-2021.pdf>

Notes

STAP advisory response	Brief explanation of advisory response and action proposed
1. Concur	STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.
	* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that <i>“STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.”</i>
2. Minor issues to be considered during project design	STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:
	(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;
	(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.
	The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.

<p>3. Major issues to be considered during project design</p>	<p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p>
	<p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>